

ABSTRACT OF THE DISCLOSURE

A gasoline engine is provided which is capable of introducing a large amount of EGR gas for performing homogeneous combustion and thus offering a good fuel economy. An external EGR mechanism or an internal EGR mechanism is used to introduce an EGR gas into a combustion chamber (a cylinder). A mixture of fresh air and fuel is thereafter directly injected from a mixture injection valve into the combustion chamber, thereby forming a region of said mixture in an area near an ignition plug. In addition, engine operating parameters are controlled in accordance with the amount of fresh air supplied into the combustion chamber (cylinder) after an intake valve has been closed. This makes possible homogeneous combustion using a large amount of EGR, which eventually increases fuel economy.